

**Abstract of the Disclosure**

A method for sterilizing a device, includes the following steps: placing the article into a chamber containing an inner atmosphere; placing a solution comprising hydrogen peroxide and water into fluid communication with the chamber, the solution having a ratio of hydrogen peroxide to water; vaporizing the solution in the inner atmosphere to form water vapor and hydrogen peroxide vapor; selectively drawing water vapor from the chamber to increase a ratio of hydrogen peroxide to water in the chamber; and contacting the article with the hydrogen peroxide vapor.